**Section 250.2450 Details**

a) Compartmentation, exits, automatic extinguishing systems, and other details relating to fire prevention and fire protection shall comply with requirements listed in the appropriate sections of NFPA 101, Life Safety Code.

b) Items such as drinking fountains, telephone booths, vending machines, and portable equipment shall be located so as not to restrict corridor traffic or reduce the corridor width below the required minimum.

c) Doors

1) Doors to patient rooms shall not be lockable from inside the room. *Hospitals shall have policies and procedures for readily gaining access to a locked bathroom in a patient's room*. (Section 11.6 of the Act)

2) Special Locking Arrangements: Electronic locking devices may be installed at specific locations to restrict egress or ingress for patient/staff safety or security, provided that each of the following is complied with and after receiving approval from the Department:

A) The facility shall submit a narrative to the Department providing a rationale for having a locked door in a required means of egress. The rationale shall relate to security issues.

B) The building shall be protected by a sprinkler or fire detection system approved by the Department.

C) All locking system components shall be U.L. listed.

D) Cross corridor, smoke, or control doors that are located in a required means of egress may be secured only with electronic locks and automatic release devices. The use of only manual keys or tools to unlock the door is not permitted.

E) Locked doors shall have continuous staff supervision (direct or electronic remote).

F) No other type of locking arrangement may be used in a required means of egress.

G) All locked doors shall release automatically with actuation of the fire alarm system.

H) All doors shall release automatically with loss of electrical power to the locking device.

I) All delayed egress locks shall initiate an irreversible process that will release the lock within 15 seconds whenever a force of not more than 15 pounds is continuously applied to the release device (lever type handle or panic bar) for a period of not more than three seconds. Relocking of such doors shall be by manual means only. Operation of the release device activates a sign in the vicinity of the door to assure those attempting to exit that the system is functional. Delays of up to 30 seconds may be acceptable based on the program narrative.

J) Permanent signs shall be posted on electronic locked doors that state the action required to open the door. Electronic delayed egress type doors shall state: "Push until alarm sounds. Door will be opened in 15 seconds." Sign letters shall be at least 1 inch high with 1/8-inch stroke. Signs may be omitted for security reasons based on the Department's review of the hospital's written rationale.

K) Emergency lighting shall be provided at all locked door locations.

L) The local fire department shall be fully apprised of locked doors or units and all related details of the system.

M) Any discharge exit door may be locked against entry.

N) Additional electronic release of locked doors initiated from a 24/7 staff duty station or an ADA compliant release device located within 5 feet of the door shall be provided. The duty station shall be located within the locked unit and staff shall be able to observe the door directly to by remote video.

O) No more than two electronic locking devices may be installed in any path of travel to exit discharge, one of which may be delayed egress.

P) Complete smoke detection shall be provided throughout the entire secured unit.

d) The minimum width of all doors to rooms needing access for beds or stretchers shall be 3 feet, 8 inches. Doors to rooms needing access for wheelchairs shall have a minimum width of 2 feet, 10 inches.

e) Doors on all openings between corridors and rooms or spaces subject to occupancy, except elevator doors, shall be swing type. Openings to showers, baths, patient toilets, and other small wet-type areas not subject to fire hazard are exempt from this requirement. Sliding doors with a break and swing feature are acceptable.

f) Doors, except those to spaces such as small closets that are not subject to occupancy, shall not swing into corridors in a manner that might obstruct traffic flow or reduce the required corridor width. (Large walk-in type closets are considered as occupiable spaces.)

g) Windows shall be designed so that persons cannot accidentally fall out of them when they are open, or shall be provided with guards.

h) Glazing

1) Doors, sidelights, borrowed lights, and windows in which the glazing extends down to within 18 inches of the floor (thereby creating possibility of accidental breakage by pedestrian traffic) shall be glazed with safety glass or plastic glazing material that will resist breaking and will not create dangerous cutting edges when broken. Similar materials shall be used in wall openings or recreation rooms and exercise rooms. Safety glass or plastic glazing materials shall be used for shower doors and bath enclosures. Fire-rated glass shall be used where required for fire safety.

2) Safety glass or plastic glazing materials as noted above shall be used in windows and doors in patient areas of psychiatric facilities, if required by the program. See the Safety Glazing Materials Act for other requirements.

i) Where labeled fire doors are required, these shall be certified by an independent testing laboratory as meeting the construction requirements equal to those for fire doors in NFPA 80, Standard for Fire Doors and Fire Windows. Reference to a labeled door includes labeled frame and hardware.

j) Elevator shaft openings shall be Class B 1½-hour-labeled fire doors.

k) Linen and refuse chutes shall meet or exceed the following requirements:

1) Service openings to chutes shall not be located in corridors or passageways but shall be located in a room of construction having a fire-resistance of not less than one hour. Doors to such rooms shall be not less than Class C ¾-hour-labeled doors.

2) Service openings to chutes shall have approved self-closing Class B 1½-hour-labeled fire doors.

3) The minimum cross-sectional dimension of gravity chutes shall be not less than 2 feet.

4) Chutes shall discharge directly into collection rooms separated from incinerator, laundry, or other services. Separate collection rooms shall be provided for trash and for linen. The enclosure construction for such rooms shall have a fire-resistance rating of not less than two hours, and the doors thereto shall be not less than Class B 1½-hour-labeled fire doors. External discharge containers need not be enclosed.

5) Gravity chutes shall extend through the roof with provisions for continuous ventilation as well as for fire and smoke ventilation. Openings for fire and smoke ventilation shall have an effective area of not less than that of the chute cross-section and shall be not less than 4 feet above the roof and not less than 6 feet clear of other vertical surfaces. Fire and smoke ventilating openings may be covered with single strength sheet glass or stronger.

6) See NFPA 82, Standard on Incinerators and Waste and Linen Handling System and Equipment for other requirements.

l) Dumbwaiters, conveyors, and material-handling systems shall not open directly into a corridor or exitway but shall open into a room enclosed by construction having a fire-resistance rating of not less than one hour and provided with Class C ¾-hour-labeled fire doors. Service entrance doors to vertical shafts containing dumbwaiters, conveyors, and material-handling systems shall be not less than Class B 1½-hour-labeled fire doors. Where horizontal conveyors and material-handling systems penetrate fire-rated walls or smoke partitions, such openings shall be provided with Class B 1½-hour-labeled fire doors for two-hour walls and Class C ¾-hour-labeled fire doors for one-hour walls or partitions.

m) Thresholds and expansion joint covers shall be flush with the floor surface to facilitate use of wheelchairs and carts.

n) Grab bars shall be provided at all patients' toilets, showers, tubs, and sitz baths. The bars shall have 1½-inch clearance to walls and shall have sufficient strength and anchorage to sustain a concentrated load of 250 pounds.

o) Recessed soap dishes shall be provided at showers and bathtubs.

p) Location and arrangement of hand-washing facilities shall permit their proper use and operation. Particular care shall be given to the clearances required for blade-type operating handles.

q) Mirrors shall not be installed at hand-washing fixtures in food preparation areas or in sensitive areas such as nurseries, clean and sterile supplies, and scrub sinks.

r) Paper towel dispensers and waste receptacles (or electric hand dryers) shall be provided at all hand-washing facilities except scrub sinks.

s) Lavatories and hand-washing facilities shall be securely anchored to withstand an applied vertical load of not less than 250 pounds on the front of the fixture.

t) Radiation protection requirements of X-ray and gamma ray installations shall conform with the National Council on Radiation Protection and Measurements (NCRP), Report 49: Structural Shielding Design and Evaluation for Medical Use of X-rays and Gamma Rays of Energies up to 10 MeV and NCRP Report 102: Medical X-Ray, Electron Beam and Gamma-Ray Protection for Energies Up to 50 MeV (Equipment Design, Performance and Use). Provision shall be made for testing the completed installation. All defects shall be corrected before use.

u) Ceiling heights shall be as follows:

1) Boiler rooms shall have ceiling clearances not less than 2 feet, 6 inches above the main boiler header and connecting piping.

2) Radiographic, operating, and delivery rooms, and other rooms containing ceiling-mounted equipment or ceiling-mounted surgical light fixtures, shall have height required to accommodate the equipment or fixtures.

3) All other rooms shall have not less than 8-foot ceilings, except that ceilings in corridors, storage rooms, toilet rooms, and other minor rooms shall be not less than 7 feet, 8 inches. Suspended tracks, rails, and pipes located in the path of normal traffic shall be not less than 6 feet, 8 inches above the floor.

v) Recreation rooms, exercise rooms, and similar spaces where impact noises may be generated shall not be located directly over patient bed areas, or delivery or operating suites, unless special provisions are made to minimize such noise.

w) Rooms containing heat-producing equipment (such as boiler or heater rooms and laundries) shall be insulated and ventilated to prevent any floor surface above from exceeding a temperature of 10°F (6°C) above the ambient room temperature.

x) Noise reduction criteria shown in Table B shall apply to partition, floor, and ceiling construction in patient areas. (See Table B for sound transmission limitations in general hospitals.) (Table B is not applicable to existing hospitals.)

y) Elevators. All hospitals having patients' facilities (such as bedrooms, dining rooms, or recreation areas) or critical services (such as operating, delivery, diagnostic, or therapy) located on other than the main entrance floor shall have electric or electrohydraulic elevators.

1) Number of Elevators

A) At least one hospital-type elevator shall be installed where 1 to 59 patient beds are located on any floor other than the main entrance floor.

B) At least two hospital-type elevators shall be installed where 60 to 200 patient beds are located on floors other than the main entrance floor, or where the inpatient services are located on a floor other than those containing patient beds. (Elevator service may be reduced for other floors.)

C) At least three hospital-type elevators shall be installed where 201 to 350 patient beds are located on floors other than the main entrance floor, or where the major inpatient services are located on a floor other than those containing patient beds. (Elevator service may be reduced for those floors which provide only partial inpatient services.)

D) For hospitals with more than 350 beds, the number of elevators shall be determined from a study of the hospital plan and the estimated vertical transportation requirements.

2) Cars and Platforms. Cars of hospital-type elevators shall have dimensions that will accommodate a patient bed and attendants and shall be at least 5 feet, 8 inches by 7 feet, 6 inches. The car door shall have a clear opening of not less than 3 feet, 8 inches.

3) Leveling. Elevators shall be equipped with an automatic leveling device of the two-way automatic maintaining type with an accuracy of +½ inch.

4) Operation. Elevators, except freight elevators, shall be equipped with a two-way special service key-operated switch to permit cars to bypass all landing button calls and be dispatched directly to any floor.

5) Elevator controls, alarm buttons, and telephones shall be accessible to physically handicapped.

6) Elevator call buttons, controls, and door safety stops shall be of a type that will not be activated by heat or smoke.

7) Inspections and tests shall be made and written certification shall be furnished that the installation meets the requirements set forth in this Section and all applicable NFPA and local codes.

z) Provisions for Natural Disasters

1) General Requirements. An emergency radio communication system is desirable in each facility. If installed, this system shall be self-sufficient in a time of emergency and shall also be linked with the available community system and state emergency medical network system, including connections with police, fire, and civil defense systems.

2) Earthquakes. In regions where local experience shows that earthquakes have caused loss of life or extensive property damage, buildings and structures shall be designed to withstand the force assumptions specified in the International Building Code. Seismic zones are identified on the map shown in Illustration A.

3) Tornadoes and Floods. Special provisions shall be made in the design of buildings in regions where local experience shows loss of life or damage to buildings resulting from tornadoes or floods.

(Source: Amended at 35 Ill. Reg. 6386, effective March 31, 2011)